

Remarks

Reconsideration of the present application, as amended, is respectfully requested.

Of previously pending claims 1-36, claims 1-10, 17-21 and 27-36 were allowed, and claims 13 and 24 were objected to. Claims 11, 12, 14-16, 22, 23, 25, 26, and 32-36 were rejected. Specifically, claims 11, 12, 14, 22, 23, and 26 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,636,482, which issued October 21, 2003 to T.J. Cloonan *et al.* (herein after “Cloonan”). Claims 15, 16, 25, and 32-36 were rejected under 35 U.S.C. §103(a) as being obvious over the Cloonan patent in view of U.S. Patent No. 6,889,385, which issued May 3, 2005 to S.S. Rakib *et al.* (herein after “Rakib”).

Accordingly, the applicants have amended claims 11, 13, 22, 24 and 32, and canceled claims 12 and 23.

The applicants first address the rejections with respect to amended independent claims 11 and 22, each of which have been amended to better point out and specifically claim the applicants’ invention. Claim 11 calls for:

A method for forwarding packets associated with a session upstream from a subscriber unit to a central access point, the method comprising:
identifying a number (N) of available service flows between the subscriber unit and the central access point;
sending a first packet from the subscriber unit to the central access point on a first service flow included in the N available service flows;
sending an (N-1)th packet from the subscriber unit to the central access point on an (N-1)th service flow included in the N available service flows;
sending an Nth packet from the subscriber unit to the central access point on an Nth service flow included in the N available service flows; and
sending a second packet from the subscriber unit to the central access point on a second service flow included in the N available service flows, wherein the second packet is substantially in sequence behind the first packet and before the (N-1)th packet and Nth packet.

The sending steps quoted above are purportedly found in col. 4, lines 35-44 of the Cloonan patent. However, col. 4, lines 35-44 deal mostly with downstream packet flow, i.e., from a CTMS (Cable Modem Termination System) to a CM (Cable Modem). Perhaps col. 5, lines 11-44 were intended. This portion of the Cloonan patent describes upstream packet flow. However, neither portion of the Cloonan patent describes the claimed sequential nature of the

first, second, (N-1)th and Nth packets, and the first, second, (N-1)th and Nth service flows carrying the packets from a subscriber unit to the central access point. Therefore, claim 11 should be allowed over the cited Cloonan patent. Claims 13-16 should be allowed for at least being dependent upon allowable base claim.

Amended independent claim 22 has language similar to claim 11 and the same arguments made with respect to claim 11 also apply here. Hence claims 22 should also be allowed. Claims 24-26 should be allowed for at least being dependent upon allowable base claim.

With respect to the rejection of claims 32-36, the applicants respectfully disagree. As amended, independent claim 32 calls for:

A device for forwarding packets to a central access point, the device comprising:
a receiving component, the receiving component being arranged to receive a plurality of packets that are to be forwarded to a central access point by a DOCSIS protocol;
a plurality of service flow identifiers which are associated with a plurality of service flows of said DOCSIS protocol; and
a routing component, the routing component being arranged to receive the plurality of packets from the receiving component; the routing component further being arranged to provide a plurality of packets to the plurality of service flow identifiers of said DOCSIS protocol on a substantially round-robin basis..

Fig. 2 of the Cloonan patent purportedly teaches the applicants' claimed "device for forwarding packets to a central access point." On the other hand, the Fig. 2 device is a CMTS (cable modem termination system). See col. 3, line 52-53 and col. 4, lines 20-22. A CMTS is normally considered to be "upstream" of a subscriber's CM (cable modem). See col. 1, lines 28-35, and communicates with a plurality of CMs or with the Internet, see Figs. 1 and 3. Presumably the Examiner did not intend to identify CMs nor the Internet, as a central access point.

Furthermore, the Rakib patent, Fig. 7a, col. 45, lines 51-67 and col. 46, lines 1-10, call for upstream transmission paths aside from DOCSIS, as the applicants understand the cited portions of the Rakib patent. "If the user has only one network interface such as an HFC interface only or an ADSL interface only installed (as determined by either a discovery process carried out by the router or by configuration data), the IP packet is forwarded to that upstream

transmitter. However, if the user has more than one network interface installed, the router may forward the IP packet to an upstream transmitter based upon any criteria such as user choice as indicated by a management and control packet sent to the gateway or a field in the IP packet, by a random or round robin selection process, or by a least cost routing algorithm that automatically pickets the cheapest service for widebandwidth internet access....If the upstream transmitter is the DOCSIS modem 770, the IP packet is transmitted upstream over a virtual channel devoted to this gateway or assigned to it on the fly by the headend.” Col. 45, line 56 - col. 46, line 7. In other words, if a DOCSIS protocol is used for upstream transmissions, only the modem 770 is used. The applicants do not see any description of service flows and service flow identifiers within upstream transmissions of the DOCSIS modem 770, as called in the applicants’ claim 32.

Hence claim 32 is patentably distinguishable over the cited prior art and should be allowable. Claims 33-36 should be allowable for at least being dependent upon an allowable base claim.

Therefore, in view of the amendments above and the remarks directed thereto, the applicants request that all rejections be removed, that claims 1-10, 13-22, and 24-36 be allowed, and the case be passed to issue. If a telephone conference would in any way expedite the prosecution of this case, the Examiner is asked to call the undersigned at (408) 868-4088.

Respectfully submitted,
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